

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) An apparatus for blocking ~~an unwholesome~~ access to undesirable web sites comprising:
  - a central control center for specifying and providing control lists of ~~unwholesome~~ the undesirable web sites to be blocked and for managing subscribers;
  - a plurality of remote control units disposed between Internet Service Providers (ISPs) and the subscribers for blocking ~~an~~ access to the ~~unwholesome~~ undesirable web sites based on the basis of the control lists to be blocked supplied from the central control center when the subscribers attempts to access to ~~an unwholesome~~ the undesirable web sites; and
  - a link control network for controlling ~~the~~ connections of the plurality of remote control units and the central control center, wherein the remote control unit includes:
    - a blocking control server, coupled to the central control center, for specifying a block list and controlling Internet connection by subscribers;
    - an access block list DB for storing the lists of undesirable web sites received from the central control center; and
    - an expert engine for analyzing a type of utilizing information by the subscribers and for transmitting the information to the central control center

when the information is to be blocked.

2. (currently amended) The apparatus according to claim 1, wherein the central control center comprises:

a central control system for searching and recording the ~~unwholesome information~~ undesirable web sites to be blocked in real time and for supplying the lists of recorded ~~unwholesome information~~ undesirable web sites to the remote control units;

a search system for searching out the ~~unwholesome information~~ undesirable web sites; and

a block list system for classifying, recording, sustaining, managing or changing the lists of the ~~Internet sites of the~~ unwholesome information undesirable web sites searched out by the search system.

3. (currently amended) The apparatus according to claim 2, wherein the search system comprises:

an automatic search system, including a web-robot for extracting all information of documents supplied on the Internet and an expert engine for checking the contents of the information extracted by the web-robot and extracting a list information of the sites containing ~~unwholesome~~ undesirable information, for automatically referring to the contents of sites registered into on the Internet and for extracting any sites containing ~~an unwholesome~~ undesirable

information; and

a manual search system for searching any sites containing ~~unwholesome~~  
undesirable information manually by an expert person.

4. (currently amended) The apparatus according to claim 2, wherein the block list system comprises:

a database system for storing lists of ~~unwholesome~~ information  
undesirable web sites to be blocked, collecting an initial data and constructing a  
database by grading the collected data according to URL to be blocked,

a classification system for determining whether an associated site is an  
~~unwholesome~~undesirable web site on the basis of site information supplied from  
the search system; and

a management system for managing the lists of the recorded  
~~unwholesome~~undesirable web sites such as categories, sites, ratings,  
~~representative words~~keywords and ~~deleting~~ invalid sites.

5. (currently amended) The apparatus according to claim 3, wherein the web-robot extracts all information of documents located on the Internet, browses investigates  
~~the redundancy of the~~ incoming information and avoids the users from devoting one site  
for an excessively long time.

6. (cancelled)

7. (currently amended) A method of blocking the connection access to an unwholesome undesirable web sites when a subscriber attempts to connect access to the unwholesome undesirable web sites, comprising:

    a first step of, when a an Internet user subscribes to a link block service, registering information regarding to the user and providing the information to a remote control unit;

    a second step of, when the registered subscriber attempts to access to a certain web site through the Internet, comparing the web site with the lists of the unwholesome undesirable web sites constituted by the central control center and a destination URLs, and determining whether the subscriber attempts to access to unwholesome information the undesirable web sites;

    a third step of, when a URL corresponding to the web site accessed by the access address of the subscriber is contained in the lists of the unwholesome undesirable web sites, determining that the subscriber attempts to access to the unwholesome undesirable web sites, and transmitting a message indicating non-allowable indicative of disallowance site to the subscriber's terminal; and

    a fourth step of, when the URL corresponding to the web site accessed by access address of the subscriber is not contained in the lists of the unwholesome undesirable web sites, providing a message of allowance to an Internet Service Provider to which the subscriber is registered, and establishing a link between the Internet Service Provider and the subscriber's terminal, wherein the comparing second step to the fourth providing step are

repeatedly performed whenever the subscriber attempts to access a web site on the Internet,-

wherein the constitution of the lists of the undesirable web sites in the central control center includes:

preparing an initial control list DB including text, picture, motion pictures, chat content, newsgroups and FTP servers information;

browsing whether the control list contains undesirable information and classifying the control list;

updating the control list DB by changing the control list into converted data based on the browsed results and the classified results;

checking the validity of each site in the control list through a web-robot, an expert engine and an Internet browsing expert; and

updating the control list DB by deleting invalid sites, wherein the control list is specified by repeating the investigating step to the updating step after preparing the initial control list.

8. (cancelled)